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FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER CHEN, SHIN HON	
			ART UNIT 2131	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/675,856

Applicant(s)

PACHL, JAN

Examiner

Shin-Hon Chen

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/9/07</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. Claims 1-38 have been examined.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-38 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-38 of copending Application No.

10/431,193. Although the conflicting claims are not identical, they are not patentably distinct from each other because both application disclose a method for communication path analysis wherein database updates upon comparison of first and second set of rules.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas U.S. Pub. No. 20040162802 (hereinafter Jonas).

6. As per claim 1, Jonas discloses a method for communication path analysis, the method comprising: retrieving a first communication path rule and a second communication path rule for an access control device, each rule comprising at least one path attribute type specifying at least one attribute range and at least one path operation type specifying at least one operation (Jonas: [0010]: data sets include different fields); inserting the first rule into a database (Jonas: [0013]); determining, for at least one path attribute type, whether at least a portion of an attribute range of the second rule corresponds to at least a portion of an attribute range of the first rule; and when at least a portion of an attribute range of the second rule does not correspond to an attribute range of the first rule for the analyzed path attribute type, inserting the non-corresponding portion of the attribute range of the second rule into the database, along with the at least one operation of the second rule (Jonas: [0017]-[0018]: creating a new entry into the database if no match is found or creating entry of the difference between new and existing entries). Jonas does not explicitly disclose the data is path rules used in firewall environment. However, it would be obvious to one

with ordinary skill in the art to apply the database management technique on any data including communication path rules used for access control rules/policies stored within a database.

7. As per claims 2, Jonas discloses the method of claim 1. Jonas further discloses wherein retrieving a communication path rule comprises parsing the rule from a firewall configuration file (Jonas: [0013]). Same rationale applies here as above in rejecting claim 1.

8. As per claim 3, Jonas discloses the method of claim 1. Jonas does not explicitly disclose wherein the at least one path attribute type comprises one or more of destination address, source address, service type, and communication time. However, standard firewall configuration files includes filters is well known in the art to include the above-mentioned attributes.

9. As per claim 4, Jonas discloses the method of claim 1. Jonas further discloses wherein inserting the first rule into a database comprises placing the at least one attribute and the at least one operation into a relational database having separate tables for the path attribute type and the path operation type (Jonas: [0017]).

10. As per claim 5, Jonas discloses the method of claim 1. Jonas further discloses determining whether a database query has been received; and if a query has been received, searching the database to determine whether any communication path rules satisfy the query (Jonas: [0013]: utilizing database structure).

11. As per claim 6, Jonas discloses the method of claim 1. Jonas does not explicitly disclose wherein the query criteria comprise one or more of destination address, source address, service type, and communication time. However, standard firewall configuration files includes filters is well known in the art to include the above-mentioned attributes and it would have been obvious to one having ordinary skill in the art to use those attribute information in comparing two data sets (Jonas: [0031]).

12. As per claim 7, Jonas discloses the method of claim 1. Jonas further discloses wherein: determining whether an attribute of the second rule corresponds to an attribute of the first rule for at least one path attribute type comprises performing a set difference operation between attributes of the second rule and attributes of the first rule for the at least one path attribute type; and inserting the attribute of the second rule that does not correspond to an attribute of the first rule into the database comprises inserting the results of the set difference operation into the database (Jonas: [0031]).

13. As per claim 8, Jonas discloses the method of claim 1. Jonas further discloses wherein inserting the attribute of second rule that does not correspond to an attribute of the first rule into the database comprises attempting to group at least one type of non-corresponding attributes of the second rule into ranges (Jonas: [0031]).

14. As per claim 9, Jonas discloses the method of claim 1. Jonas further discloses retrieving a first communication path rule for a second access control device; and inserting the first communication path rule for the second access control device into the database (Jonas: [0031]).

15. As per claim 10, Jonas discloses the method of claim 9. Jonas further discloses determining whether a database query has been received; and if a query has been received, searching the database to determine whether any communication path rules satisfy the query (Jonas: [0013]: utilize database structure).

16. As per claim 11, Jonas discloses the method of claim 1. Jonas further discloses wherein determining whether an attribute of the second rule corresponds to an attribute of the first rule for at least one path attribute type is performed only for a set of operations (Jonas: [0017]: determining if any field in the data match).

17. As per claim 12-38, claims 12-38 disclose system and article that encompass the same scope as claims 1-11. Therefore, claims 12-38 are rejected based on the same reasons set forth above in rejecting claims 1-11.

#### ***Response to Arguments***

18. Applicant's arguments filed on 10/9/07 have been fully considered but they are not persuasive.

Regarding applicant's remarks, applicant argues that the prior art of record does not explicitly disclose retrieving a first communication path rule and a second communication path rule for an access control device, each rule comprising at least one path attribute type specifying at least one attribute range and at least one path operation type specifying at least one operation. However, the examiner agrees that the Jonas reference does not mention firewall rules and thus stated in the previous office action that it would be obvious to one having ordinary skill in the art to apply the database management technique into firewall rule management because database management applies to data including but not limited to firewall rules. Furthermore, firewall rules consisting of communication path rules and attribute range is well known in the art as firewall parameters and examiner has included new prior art related to firewall parameter for consideration. Therefore, applicant's argument is traversed.

### *Conclusion*

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mayer et al. U.S. Pat. No. 7016980 discloses method for analyzing one or more firewalls.

Henderson et al. U.S. Pat. No. 7133400 discloses method for filtering data.

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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